TABLE 5-1: Proposed Casing String Details

Tubular	Depth (ft)	Size (in)	Weight (lb./ft)	Grade	Thread	Collapse/ Burst	Tensile Body/Joint (X 1000 lbs)
Conductor/Drive Pipe	100	30.0	118/157		Welded	-------	-------
Potable Water	300	24	171	K-55	ER	1160/2760	2,771/2,771
Surface Casing	1,200	18-5/8	87.5	K-55	Buttress	630/2,250	1,367/1,427
Intermediate Casing	0 - 3,000	13-3/8	61	K-55	Buttress	1,540/3,090	962/1,169
Intermediate Casing	3,000 - 3,900	13-3/8	61	13CR65	VAM ST-L	1,620/3,660	1,137/681
Protection Casing	0 - 3,000	9-5/8	36	K-55	LTC	2,020/3,520	564/489
Protection Casing	3,000 - 7,000	9-5/8	36	22CR65	VAM ST-L	2,190/4,160	667/400

TABLE 5-2: Proposed Injection Tubing Details

Tubular	Depth (ft)	Size (in)	Weight (lb/ft)	Grade	Thread	Collapse/ Burst	Tensile Body/Joint (X 1000 lbs)
Injection Tubing	4,800	5.5	20.0	22CR65	Tenaris Blue	7,540/7,680	379/379
Injection Tubing/Spacer Tubing	4,800 - 5,225	5.5	20.0	22CR65	Tenaris Blue	7,540/7,680	379/379

TABLE 5-3: Proposed Well Fluids Program

Hole	Depth (feet)	Mud Type	Weight (lb/gal)	Viscosity (funnel sec)	Fluid Loss (cc/30 min)
Potable Water	100 - 300	Water Base/Spud Mud	8.4 – 9.0	40 – 50	none
Surface	100 - 1,200	Water Base/Spud Mud	8.8 – 9.0	40 – 50	<15
Intermediate	1,200 - 3,900	Potassium-Based	9.2 – 9.5	35 – 50	8 - 10
Protection	3,900 – 7,000	Potassium-Based	9.4 – 10	35 – 50	8 - 10

TABLE 5-4: Potable Water Casing Cement Program

Cement Stage Recipe	Coverage (ft.)	Weight (ppg)	Yield (ft^3/sx)	Water (gal/sx)	Volume (sx)	Notes:
Lead Cement	200	12.5	2.23	12.58	250	Class A Conventional w/LitePoz 3 extender
Tail Cement	100	14.8	1.35	6.41	170	Class A Conventional

TABLE 5-5: Surface Casing Cement Program

Cement Stage Recipe	Coverage (ft.)	Weight (ppg)	Yield (ft^3/sx)	Water (gal/sx)	Volume (sx)	Notes:
Lead Cement	900	12.5	2.23	12.58	525	Class A Conventional w/LitePoz 3 extender
Tail Cement	300	14.8	1.35	6.41	390	Class A Conventional

TABLE 5-6: Intermediate Casing Cement Program

Cement Stage Recipe:	Coverage (ft.)	Weight (ppg)	Yield (ft^3/sx)	Water (gal/sx)	Volume (sx)	Notes:
Stage 1: from 3,900 feet to 3,000 feet						
Slurry	900	16.02	1.11	3.42	880	CO_2 Resistant Evercrete™ (or equivalent)
Stage 2: from 3,000 feet to 1,450 feet						
Lead Cement	1,250	13.5	1.44	7.07	905	Class A Lead
Tail Cement	300	14.5	1.20	5.29	265	Class A Conventional
Stage 3: from 1,450 feet to Surface						
Lead Cement	1,150	13.5	1.44	7.07	600	Class A Lead
Tail Cement	300	14.5	1.20	5.29	250	Class A Conventional

TABLE 5-7: Protection Casing Cement Program

Cement Stage Recipe:	Coverage (ft.)	Weight (ppg)	Yield (ft^3/sx)	Water (gal/sx)	Volume (sx)	Notes:
Stage 1						
Tail Cement	4,000	16.02	1.11	3.42	1,615	CO_2 Resistant Evercrete™ (or equivalent)
Stage 2						
Lead Cement	2,500	13.5	1.44	7.07	640	Class A Lead (5% excess)
Tail Cement	500	14.5	1.20	5.27	145	Class A Conventional